

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

With decade's development, computers have changed the way people live and study especially in education. The use of computers so far has changed the traditional teaching methods. With the help of computer, teacher can express their idea and lesson more precisely and show it in clearly way with the help of pictures, audio, videos and graphics. There are not only blackboard and chalk thus make the classes become more exciting and interesting for student to learn.

Courseware acts as the medium to combine all the above aspects such as graphics, images, audio and video to present it to the students. Courseware is a term that combines the word course and software. Multimedia courseware use the different communication mediums to assist the student understand the subject that is being presented or illustrate ideas. With the rapid enhancement on interactive multimedia (IMM) courseware in the form of stand-alone CDs or DVDs and the web, student has been provided with exciting new learning styles with the combination of information and entertainment that thus create a new term in education that is, "edutainment". The establishment of smart school recently across Malaysia has rising a demand for more locally produced educational multimedia

courseware. Besides, foreign educational courseware which was used before is now considered not quite appropriate for the Malaysian educational environment and learning needs. Hence, lots of courseware being develops but only a small number of them that meet the student's requirement. They did not concern about the student's learning styles and lack interaction with the students.

Based on the problems, this Interactive English Multimedia courseware is developed as one of the solution for the above problems. The courseware combines the two techniques which are Adaptive User Interface technique (AUI) and decision support technique to improve on the interface and user interaction. The Adaptive User Interface Technique (AUI) let the students to choose the characters of narrator while the decision support technique assist the students to make decision while navigate around the courseware. The courseware treats the students as the main part of the learning process. This courseware concentrate on the English Language subjects for the preschool students aged 6 years old. The modules follow the English Language curriculur standard by Malaysia government. English language is chose because in Malaysia, it is the second language to master and it is a great way to learn it from the early age. It is hoped that this courseware will improve and enhance the quality of the traditional multimedia courseware as well as to assist students to learn English language in fun way.

## **1.2 Problem statement and motivation**

Education plays an important role in development of human knowledge. Thus, with the help of advance technology, the learning process becomes interesting and exciting. Due to the increase of technology, interactive multimedia (IMM) courseware has the potential to catch the students' attention while in the class as well as to improve their understanding of the subject. Studies have shown that students get more information from the presentation that combine videos, audio, picture and graphic. It obviously shows that students learn more effectively with the multimedia courseware than the traditional method that uses blackboard and chalk. Today, there are a lot of demand come from the local people who search for a good courseware to be used for their Childs or students. Indeed lots of

multimedia courseware that being develop, but only a small part of them suitable to be used. This is because the courseware created as only for the teachers but not for the students who are the main part of learning process. The interfaces are not so friendly and students got problem while navigate through it. They sometimes cannot choose their own preferences such as the character of the narrator. Besides, when the students get stuck while using the courseware, there are no options or recommendations for them on how to get out from the situation or how to do next. Generally, the courseware did not have decision support technique. Because of the above problems, lots of courseware did not really suitable to be used and as result the teachers still used the traditional methods while the parents prefer to buy books than courseware.

### **1.3 Objectives**

The objectives of this project are:

- i. To develop interactive English multimedia courseware for the preschool students aged 6 years old.
- ii. To implement the Adaptive User Interface technique (AUI) in the courseware to let the user change the character of the narrator.
- iii. To implement the decision support technique in the courseware to assist the user to make decision while using or navigating the courseware.

### **1.4 Scope**

The scopes of the project that have been identified are:

- i. This interactive multimedia courseware is developed for Malaysia preschool students aged 6 years old.
- ii. This interactive multimedia courseware is a standalone DVD system.
- iii. English language is choosing for the courseware content and it follows the guideline of National Education Curricular by Malaysia Government.